<212> DNA
<213> Artificial Sequence

<223> Description of Artificial Sequence:synthetic primer

<400> 5
aggtcgacgg tatcggnnn 19

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<223> Description of Artificial Sequence:synthetic primer

<400> 6
aggtcgacgg tatcggnnnn 20--

IN THE CLAIMS

Please cancel claims 1-37. Please add claims 38-43 as follows:

38. A method of producing a transformed polynucleotide sequence database entry, comprising the steps of:

choosing a source sequence from a polynucleotide sequence database entry;

locating a poly(A) tail sequence within the source sequence;

locating an endonuclease recognition site sequence within the source sequence that is closest to the first recognition site;

determining an index sequence consisting of about two to about six nucleotides adjacent to the endonuclease recognition site;

determining a correlate sequence within the source sequence, said correlate sequence including the sequence bounded by the poly(A) tail and the endonuclease recognition site and

including at least part of the endonuclease recognition site;

determining the length of the correlate sequence; and

storing information concerning the location and sequence of the poly(A) tail, the location and sequence of the endonuclease recognition site, and the length of the correlate sequence in relation to the source sequence, thereby producing a transformed database entry.

39. The method of claim 38 further comprising the step of:

displaying graphically the length of the correlate sequence in relation to the index sequence.

40. The method of claim 39 wherein the restriction endonuclease is chosen from the group consisting of MspI, TaqI and HinP1I.

41. A method of improving resolution of the length and amount of PCR products by diminishing background that is due to amplification of untargeted cDNAs comprising the steps of:

selecting a sample of a cRNA population, wherein each cRNA molecule comprises insert sequence and vector-derived sequence;

performing reverse transcription using a reverse transcription primer that hybridizes to the vector-derived sequence and that extends about five nucleotides to about six nucleotides into the insert sequence to produce a cDNA reverse transcription product;

subdividing the cDNA reverse transcription product;

performing at least one polymerase chain reaction using the subdivided cDNA reverse transcription product, a 3'PCR primer and a 5' PCR primer that hybridizes to the vector-derived sequence and extends about seven nucleotides to about nine nucleotides into the insert sequence to produce a PCR product, thereby diminishing background that is due to amplification of untargeted cDNAs.